

Appl. No. 10/089,541

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A lid-provided backing support for a test device for performing assays without separate pretreatment of the sample, comprising a pretreating system mounted on the backing support (1) and covered and protected by a lid (2) with an aperture (3) in a lid-portion, said pretreatment system having one or more layers (4) horizontally stapled on each other and assembled in a capillary flow connection with a test strip (5), characterized in that said lid and the lid-portion of said lid-provided backing support is provided with means (7, 8 and 9) of different sizes and heights for securing and fixing the positions of the layers of the pretreatment system, said means comprising taps (7) supporting the pretreatment layers (4), preventing the layers (4) from lying directly on the lid-provided backing support (1) and forcing the sample solution and diluent to pass through the pretreatment layers (4) in predetermined order before entering into the test strip (5), side wall protrusions providing flanking supports (8) preventing the pretreatment layers from moving backwards or in side direction, and bars (9), which can be of different heights and sizes, which fix the pretreatment layers and act as fastening and supporting means for the pretreatment layers (4.1) and (4.2) and the test strip (5), and at least one bar (9.4), which forms a compartment (6) which allows excess sample solution and diluent to be collected behind the pretreatment layers and negative backwash effects to be avoided, and said compartment (6) to be emptied by controlled and even flow by capillary forces of the sample and diluent through each layer in predetermined order and subsequently into and along the test strip (5).

2. (Currently Amended) The lid-provided backing support according to claim 1, characterized in that the flanking support preventing the pretreatment layers from moving backwards (8.1) is placed in the rear end of the lid-portion of the lid-provided backing support (1) and assists in the formation of the compartment (6) for excess liquid.

3. (Currently Amended) The lid-provided backing support according to claim 1, characterized in that the flanking supports (8.2) preventing the pretreatment layers from moving in side directions simultaneously force the sample solution and diluent to move through the layers in predetermined order and prevent them from passing outside the layers along the backing support.

4. (Currently Amended) The lid-provided backing support according to claim 1, characterized in that the means for securing and fixing the pretreatment layers comprises at least one toothed bar (9.3), which secures the connection between the pretreatment layer and the conjugate pad (B) of the test strip.

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5. (Currently Amended) The lid-provided backing support according to claim 1, characterized in that the pretreatment system comprises one or more layers (4) providing physical and/or chemical means for pretreating the sample.

6. (Original) The lid-provided backing support according to claim 5, characterized in that the physical means for separating and/or removing components from the sample solution are provided by filter layers with variable thickness and size.

7. (Original) The lid-provided backing support according to claim 5, characterized in that the physical means for separating and/or removing components from the sample solution comprise one or more filter layers having shaped pores with different diameters on each side of the filter layer.

8. (Original) The lid-provided backing support according to claim 1, characterized in that the chemical means for treating the sample solution comprise buffering, ionic strength regulating, agglutinating, disrupting, extracting, immunocapturing, immunocatalytic, coagulating and/or lytic agents as well as catalyzators, labels, markers, enzymes, substrates and/or reagents.

9. (Currently Amended) A method for carrying out a rapid bed-side or field test with the lid-provided backing support according to ~~any of claims 1 to 8~~ claim 1, which lid-provided backing support comprises pretreatment layers and a test strip, characterized in that it comprises the steps

(a) adding a liquid sample through the aperture (3) in the lid (2) placed on the pretreatment layers of the lid-provided backing support;

(b) adding a diluent, which is capable of redissolving from the pretreatment layers the reagents impregnated therein; mixing the sample with redissolved reagents and driving the sample and reagent mixture through the pretreatment layers, whereby particles are captured and interfering substances are removed in a controlled manner;

(c) collecting the excess liquid in the compartment (6) to enable a controlled and even flow through the pretreatment layers into the test strip (5); and

(d) recording the visible or readable result in the test strip.

10. (Currently Amended) The use of the lid-provided backing support for a test device according to ~~any of claims 1 to 8~~ claim 1 for assessing ferritin from blood.

11. (Currently Amended) The use of the lid-provided backing support for a test device according to ~~any of claims 1 to 8~~ claim 1 for screening the risk of developing iron deficiency anemia.

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12. (Currently Amended) The use of the lid-provided backing support for a test device according to
| ~~any of claims 1 to 8~~claim 1 for screening presence of environmental contaminants.